



Why Do We Explore Space?

-Some Opinions on this Question

- 1. To learn about the universe around us. Human beings are curious and like to explore.**
- 2. To search for life on other worlds.**
- 3. To inspire people to reach for the best in themselves.**
- 4. To develop new technologies that can benefit life here on Earth. Much of the technology NASA invents can be used for other applications here on Earth. (Space Spin-Offs) Some studies say that every dollar we invest in NASA returns several dollars to the U.S. economy in some way.**
- 5. To ensure the long-term survival of the human race. We currently have all of our eggs on one basket.**
 - A. The population of the Earth is constantly growing. Someday we will likely run out of room on the Earth for more people, especially if we do not want to destroy too much of the natural environment here on Earth.**
 - B. It takes decades, even centuries, to develop advanced spacecraft. We need to start now on learning how to build these systems.**
 - C. To protect the Earth from asteroids and comets. Any one of these could end most of the life on Earth if they strike our planet. (It has happened before) We could use space technology to give us a chance to save ourselves. Viruses, volcanic eruptions, gamma ray bursts & black holes could also threaten the survival of the human race at any time. By expanding human presence beyond Earth, we increase the chances our species will survive long term.**
- 6. To find new resources. Our natural resources on Earth will not last forever. Many of these resources can also be found in space. Asteroids contain metals and other materials that could be mined for use elsewhere. There is even frozen water on other worlds in our solar system.**
- 7. To understand more about the Earth. By studying other planets, we can compare them to the Earth and learn more about our home planet. We can then make better decisions about to protect the Earth. For example, Mars was once much warmer and probably had liquid water on the surface. (Maybe even simple life forms) But at some point in the past, Mars became much colder and the atmosphere thinned. Why? Could this happen to the Earth?**
- 8. To take advantage of the Microgravity environment of space. The very low gravity allows experiments to be conducted with materials that behave very differently in space than on Earth. This could lead to space-based factories that make products that cannot be made on Earth, or help us learn how to make the same items on Earth in a better way.**
- 9. To stimulate the economy by providing high-tech jobs that increases the technological leadership of the U.S.**

Why Some Say We Should Not Explore Space.

-Some Opinions on this Question

- 1. Government money used for space travel should be spent to solve our problems here on Earth first. (But if you use that excuse, then it would never happen.)**
- 2. Space exploration is too dangerous and too expensive. (See below)**



How Much Money Does NASA Spend in a Year?



- 1. The NASA budget is about \$16 billion per year. This represents approximately 0.7% of the federal budget of 2.8 trillion dollars. To put that into perspective, let's assume the federal government spends \$2800 per year-NASA would get \$16 of that.**

